FACT SHEET: FORT DETRICK

National Cancer Institute • National Institutes of Health • Department of Health, Education, and Welfare

January 1972

NIH, National Cancer Institute
Bethesda, Maryland 20014
January 1972

FACT SHEET ON FORT DETRICK

On October 18, 1971, President Nixon announced that the Army's Biological Defense Research Center at Fort Detrick, Md., would be converted into a leading center for cancer research as part of the major campaign to conquer cancer. Laboratories and animal facilities valued at more than $70 million are being turned over to the Department of Health, Education, and Welfare's National Cancer Institute. Under the new program the facilities will be dedicated to research on the causes and treatment of cancer, the nation's second major cause of death. By June 1972, or soon thereafter, cancer research will be under way in some of the laboratories; within the next 3-5 years an estimated 80 percent of the laboratories could be operational.

WHERE IS FORT DETRICK LOCATED?

Fort Detrick is on the northwest edge of Frederick, Maryland. The main post area occupies approximately 500 acres.

The facility is 40 miles from the National Institutes of Health in Bethesda, Maryland, and 50 miles from Washington, D. C.

HOW WILL THE FACILITY BE OPERATED?

The Government-owned facilities at Fort Detrick will be managed by a private contractor. This arrangement is currently utilized successfully by a number of Government agencies, notably Union Carbide operation of the Atomic Energy Commission facility at Oak Ridge, Tennessee, and McDonnell Aircraft operation of the National Aeronautics and Space Administration's Cape Kennedy facility.

Operation by a private contractor allows flexibilities that would be difficult under direct Government operation:

1) A contractor is stimulated to compete for support from other Government sources as well as from the private sector, thus providing the best milieu for a healthy and diversified scientific and business input into the area of Fort Detrick;
2) Contractor operation will insure a greater flexibility to the Government in the expected shifting and updating of priorities that the new National Cancer Program will and should require;
3) Operation by a contractor is consistent with the policy of the Administration to reduce direct Government payroll, and to stimulate participation by the competitive private sector in national health programs.

WHAT TYPE OF CONTRACTOR WILL BE SELECTED?

The National Cancer Institute advertised in the November 12, 1971 issue of Commerce Business Daily for resumés of demonstrated capability from general research and management contractors in disease research and control. The successful contractor will be responsible for biomedical research in cancer and must have available professional personnel in the fields of medicine, veterinary medicine, pathology, and microbiology, including virology, biochemistry, and immunology. In addition, the successful contractor must have the capability for overall fiscal, personnel and logistics management, as well as scientific management of a large-scale research facility.

WHAT KINDS OF EMPLOYEES WILL BE WORKING FOR THE MAIN CONTRACTOR?

The contractor will be responsible for selection of scientific and support personnel for its work at Fort Detrick. Persons residing in the Frederick, Maryland area who formerly worked for the Department of the Army at the facility will be given priority in the hiring process. In addition, American academic scientists, visiting scientists from other countries, and about 20 National Cancer Institute personnel (primarily project liaison and safety officers) will be located at the facility.

An estimated 200 employees will begin operation of Fort Detrick upon award of the contract. Of these, approximately 30-40 will be scientists. In five years, the contractor may be employing approximately 600 persons.

HOW ARE CONTRACT NEGOTIATIONS BEING HANDLED?

Statements of capability from potential contractors were received by the Research Contracts Branch, Office of the Director, National Cancer Institute, NIH on or before the advertised deadline of December 3, 1971.

From this group, a limited number of potential contractors with the highest capabilities will receive a request for proposal (RFP). Those receiving the RFP will be invited to participate in a bidders' conference. Planned for early January 1972, this meeting will include a tour of Fort Detrick and release of detailed information on inventory and operating costs at the facility, based on the Army's expenses in the past. Information on the operating costs is included in the Request for Proposals. Statements of workscope and bid must be submitted to the National Cancer Institute on or before March 1, 1972.

WHAT IS THE SIZE OF THE CONTRACT COMPARED TO NCI'S TOTAL BUDGET?

Fort Detrick will be the National Cancer Institute's largest single contract.

	Fort Detrick	Entire National Cancer Institute
Fiscal Year 1972	$ 2-3 million	$337.5 million, including $100 million supplement
Fiscal Year 1973 (proposed)	$ 6 million	$425 million (estimated)
In five years (proposed)	$15-20 million	$1.167 billion (estimated)

WHEN WILL THE ARMY TRANSFER THE BUILDINGS TO THE NATIONAL CANCER INSTITUTE?

The National Cancer Institute-HEW is now negotiating for a use permit with the Department of the Army for a long-term period of approximately five years. Following the attainment of the lease, negotiations will be pursued to transfer the Fort Detrick facilities to the Department of Health, Education, and Welfare. These buildings are located primarily within the old inner "high security" fence. Phase-in for actual use of these buildings has been divided into three categories: immediate use; use in two to five years; and use after five years when the facility is operating at full capacity.

Property transfer may not be complete for two or three years, however, because of legal requirements to be met in transferring property between Federal agencies. Until the legal requirements have been met, the National Cancer Institute will be at Fort Detrick on a use permit basis.

The National Cancer Institute will utilize approximately 80 percent of the permanent structures and some of the temporary buildings located at the southwestern part of the facility. (See attached sheets.)

WHEN WILL THE FACILITY BE READY FOR THE NATIONAL CANCER INSTITUTE'S CONTRACTOR?

Extensive repairs and modifications are needed in some of the buildings. An estimated $1 million will be spent on immediate necessary repairs during 1972. These and other renovations will be the responsibility of the contractor.

Most of the buildings should be ready by May 1972. Occupation by the prime contractor is planned for June 1972.

Outside grounds maintenance at the facility as well as certain support services, such as heat, sewerage, etc. will continue to be handled by the Army under the Office of the Post Commander at Fort Detrick through an interagency transfer of funds arrangement.

HOW ARE THE LABORATORIES DECONTAMINATED OF INFECTIOUS AGENTS AND WHAT IS THEIR STATUS?

In the decontamination process, the vents and safety hoods in the laboratories are treated with formaldehyde, the drains backflushed with hypochlorite solution. Pure formaldehyde is vaporized through the buildings at 80° F and 50 percent humidity after sealing. After an extended period the buildings are reopened and aired out.

The building decontamination probably will not be completed until next spring because of the difficulties of maintaining the required temperature conditions during the winter. For this reason, some of the buildings are not open to the public.

The Department of the Army did not store large quantities of organisms infectious to man at Fort Detrick. The organisms used in research have now been destroyed in steam autoclaves. Some quantities of crop disease agents which remain are being destroyed by the Army.

WILL THE "HIGH SECURITY" GROUNDS RESTRICTIONS IMPOSED BY THE ARMY CONTINUE AFTER THE BUILDINGS ARE TRANSFERRED TO THE NATIONAL CANCER INSTITUTE?

No. The National Cancer Institute is considering removal of the high security fence surrounding the permanent laboratory structures. The entrance gate will be used mostly as an information center, and the Army is planning a phase-out of security precautions on the grounds.

WHY IS FORT DETRICK SUITED TO CANCER RESEARCH?

The unique feature of the Fort Detrick facility is that its laboratories were designed and equipped to work with the most hazardous agents at a minimum risk to the worker.

For example, a plant operated by the Army steam-sterilizes all sewage. Air going into the laboratories is filtered; air going out is incinerated by mixing it with natural gas in a gas-fired boiler.

Conclusive proof that a laboratory-grown virus is infectious for man is an occurrence of laboratory-acquired infections. It will be extremely difficult to prove that highly concentrated and purified viral isolates and viral nucleic acids are not infectious for the laboratory worker. Therefore, it is imperative that research on these agents be confined to a high safety facility. The Fort Detrick laboratories are well suited for these studies.

With the expansion in cancer research over the next few years, it can be expected that additional new, unknown, potentially hazardous human tumor viruses will be discovered. In addition, experiments using highly toxic cancer-causing chemicals may unmask heretofore unknown agents from human cells. The rapid expansion of research in the molecular virology area and in the preparation of hazardous materials in large volumes increases the potential risk to the worker. Until research can demonstrate that these agents cannot infect man, all possible precautions must be taken to protect not only the laboratory worker but the surrounding environment in which the laboratory is located.

WHAT TYPE OF RESEARCH WILL BE DONE FIRST AT FORT DETRICK?

The National Cancer Institute's contractor will begin three types of work immediately upon location:

1) animal production for use in experiments;
2) study of the cancer-causing potential of numerous substances;
3) virus production and study of the possible viral causes of cancer.

WHAT TYPE OF RESEARCH WILL BE DONE DURING FULL CAPACITY OPERATION?

Virology

The Virology program at Fort Detrick will be expanded to include work on several viral isolates from human tumor material. This will necessitate the production of large volumes of highly concentrated and purified hazardous cancer viruses and their nucleic acids. Immunological studies will require specific biochemical components of these agents. Research will be conducted in animals to determine the potential spread of these viruses from animals to man or to laboratory workers engaged in studies with hazardous materials. Studies utilizing viral agents and highly concentrated and toxic chemicals extracted from man's environment will be conducted both in cell culture and in animals.

Chemical Carcinogenesis

Screening of chemical compounds and other environmental agents for cancer-causing activity will be conducted in a variety of animal species. Such studies will include exposure of animals to suspect chemicals during their life-spans. Additional efforts such as tissue and organ culture will be directed toward the development of more rapid systems for detecting cancer-causing activity. The selection of agents to be screened and the choice of the animal model for screening will be made in cooperation with the contractor.

Animal Production

The animal production facilities at Fort Detrick are among the largest and best of their kind in the country. The unique feature is that they consist of 24 separate animal buildings with individual air-conditioning units. Since acute diseases in animals can spread rapidly from one animal to another, the numbers of animals lost in an epizootic would be limited to a single building or to a specific area within a building. It is also possible to work with many kinds of animals and viruses.

The animal colony is a "closed" colony of inbred rodents, free from contamination by normal bacteria. Mice, hamsters, rabbits, rats, and other needed animals will be bred and housed in the facilities.

In addition, the facility is almost totally automated (animal watering, feeding, etc.), a fact that markedly reduces labor costs. The current animal production facility can operate with 25 people and can be expanded to 50 people during maximum operating capacity.

Animal Holding

Animals inoculated with highly infectious agents will be closely monitored for the development of cancer. The facility has individually ventilated cages and the capacity of holding 150,000 mice (10 per cage), 15,000 guinea pigs, or 1,500 monkeys. The facility contains lead-lined X-ray rooms, modules for tissue examination and study, plus all the essential support requirements for care and maintenance of the animals. Recently completed at a cost of $2.3 million, the facility is available for immediate use. Two to three years would be required to duplicate this facility elsewhere.

This facility has never been used. It was completed after the President's decision to terminate all biological warfare activities.

Biohazards

Fort Detrick's world-renowned expertise in bioengineering and biohazard containment will be utilized and expanded to develop safety facilities, equipment, and procedures for the protection of the environment and of clinical and research personnel throughout the world.

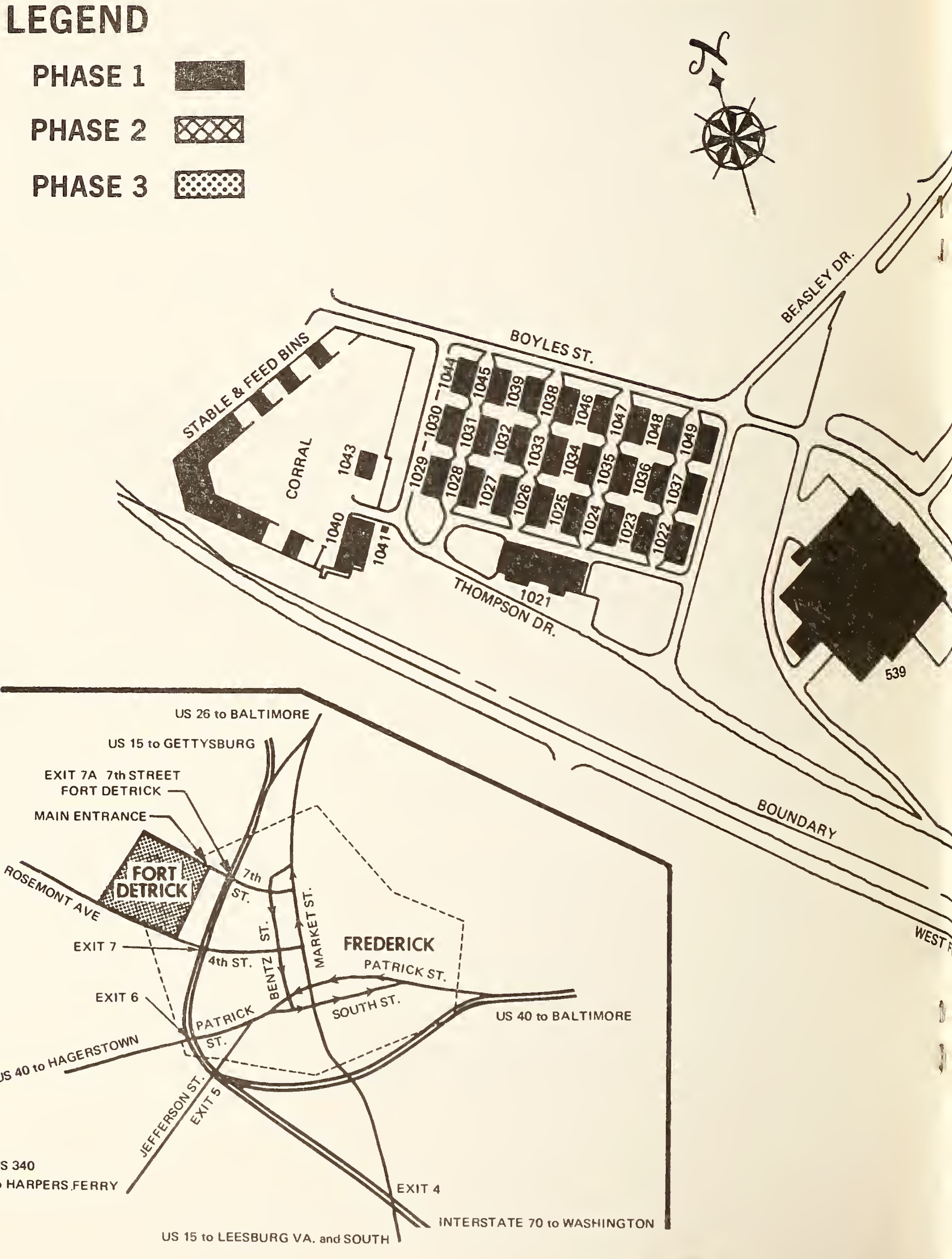
WHAT BIOLOGICAL INVESTIGATIONS OTHER THAN THOSE CONDUCTED BY THE CANCER PROGRAM WILL BE CONDUCTED AT FORT DETRICK?

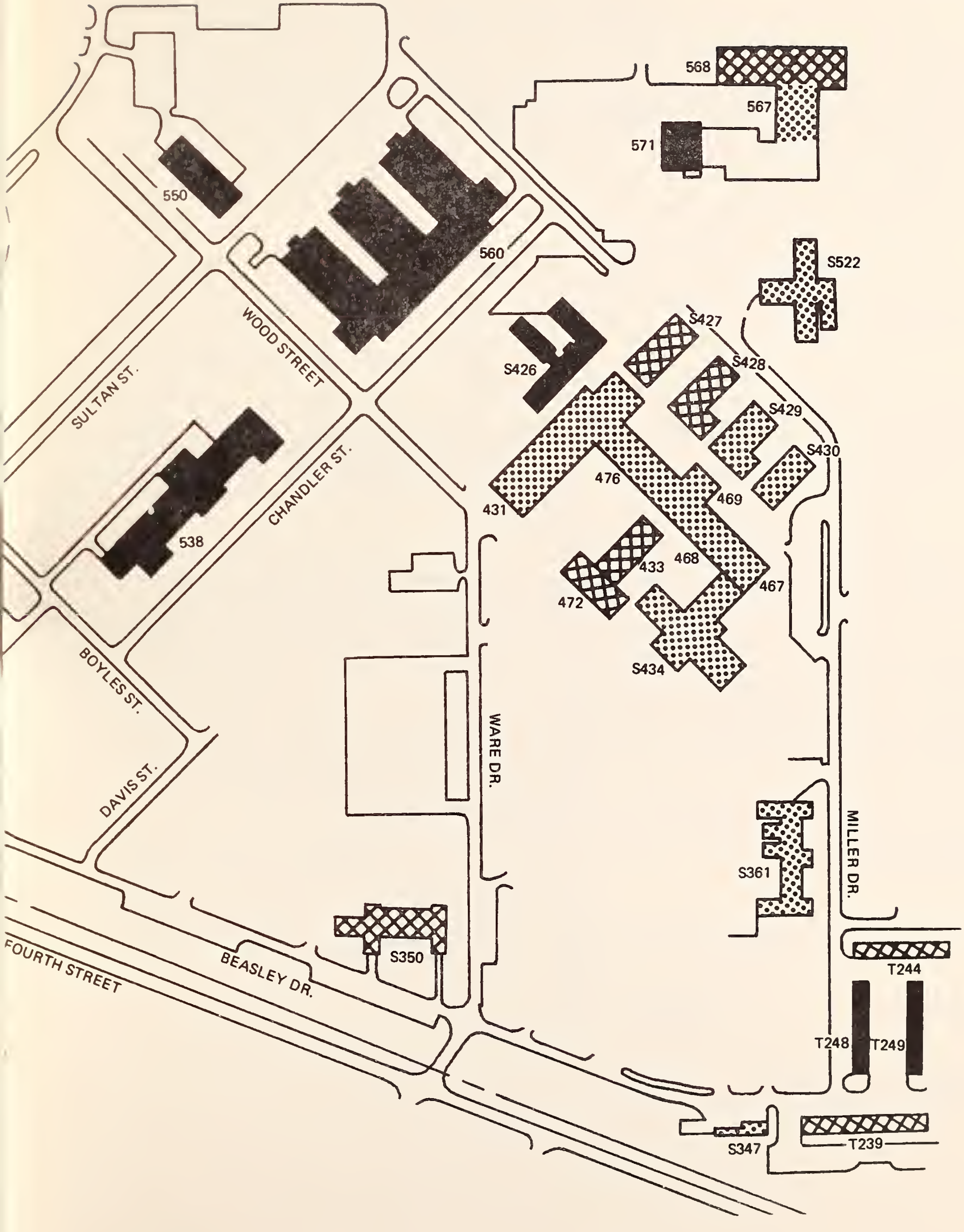
The Department of the Army will continue to perform research at Fort Detrick that will be directed toward other major diseases of man. One of the principal research programs is in the field of aerosol studies of human respiratory disease. Studies are under way to develop methods for stimulating protective mechanisms such as the production of interferon, a normal body constituent which is believed to exert a protective effect in virus infections. Other studies are directed toward the development of vaccines against some of the important diseases common to animals or transmitted from animal to man.

The Department of Agriculture will conduct research on the cause and prevention of plant diseases such as rice blast and wheat rust in facilities that were used previously for the development of anti-crop agents.

The National Park Service will collaborate in the studies by the Department of Agriculture.

NCI FORT DETRICK FACILITY




568
567
571
550
560
S522
S427
S426
WOOD STREET
SULTAN ST.
S428
S429
S430
476
469
CHANDLER ST.
431
538
433
468
467
472
S434
BOYLES ST.
WARE DR.
DAVIS ST.
MILLER DR.
S361
S350
FOURTH STREET
BEASLEY DR.
T244
T248
T249
S347
T239

The U. S. Army Medical Research Institute of Infectious Diseases will continue to conduct research on infections which affect our troops in various parts of the world. Army scientists are also concerned with basic research and vaccine development against viral diseases, particularly those diseases not being studied by other agencies. For example, this organization developed and supplied vaccine against Venezuelan equine encephalitis that recently threatened horses and man in the southwest United States and Mexico. All activities of this unit are and have been totally unclassified.

The U. S. Army East Coast Telecommunications Center is also located at Fort Detrick.

BUILDINGS AND AREA FOR USE AT FORT DETRICK BY THE NATIONAL CANCER INSTITUTE

Category I for immediate NCI occupancy (Phase-in by selected contractor)

		FUNCTION WHEN OPERATED BY THE DEPARTMENT OF THE ARMY
Physical Sciences Laboratory	538	Biochemistry, physical chemistry, organic and analytical labs, biophysics, radiology, fluorescence microscopy, electron microscopy, electrophoresis, electronics, immunopathology, histology, histochemistry, serology, autopsy, surgery rooms
Viral and Rickettsial Laboratory	539	Microbiological research, electron microscopy, housing of infectious and normal laboratory animals. Utility space, animal holding, glassware preparation, change room facilities
Safety Research	550	Support for safety program, pathogen assay
Bacteriological Laboratory (two levels, three wings)	560	Research on bacteria, fungi, mammalian cell lines, animal holding, change rooms, cold rooms, incubators, dishwashing and storage facilities--most infectious pathogens can be studied safely.
Experimental Holding Laboratory	571	Long-term animal holding on animals exposed to highly infectious biological agents and their toxic products. Observation. Animals studied in accordance with microbiological, toxicological, immunological, pharmacological, and pathological procedures.
Animal Farm	1021-1041	Animal holding
	1043-1049	Animal holding
Technical Information Center (Library)	S426	

T248	Warehouse
T249	Warehouse

Category II to be held on standby for NCI. To remain heated and connected to utilities. May be used by Department of the Army or other agencies on a temporary basis until NCI can determine the extent to which this group of facilities should be included in the cancer initiative. (Estimated standby cost: $75,000 per year.)

568	Administration Bldg. (Half to NCI; half to Department of the Army)
472	Simulant Pilot Plant
433	Extension of 472
S427	For conversion to animal holding
S428	" " " " "
S350	Shops
T239	Warehouse
T244	Warehouse

Category III to be mothballed by draining all utilities and shutting off heat. Alternatively these buildings may be used for up to 5 years by the Department of the Army or other agencies at no cost to NCI.

567	Class III Laboratory
S522	Microbiology Laboratory
468	Microbiology Laboratory
469	Microbiology Laboratory
467	Class III Laboratory
431	Virus Pilot Plant
S434	Egg Production Facility
S429	Microbiology Laboratory
S430	Microbiology Laboratory
S361	Carpenter Shop
S347	Gas Storage

All structures directly supporting the chosen buildings included under NCI control, such as air-conditioning towers, air incinerators, etc.

Certain facilities will continue to be operated by the Department of the Army. These include:

375 and 384	Decontamination facilities for sewage
190	Boiler plant complex
1054	Shops

PROJECTED TIMETABLE

.....for the advertisement, negotiation and award of a contract from the NIH National Cancer Institute for management and research at Fort Detrick. The Selection Board for this contract is composed of officials from various areas within the National Cancer Institute, including Etiology, Chemotherapy, General Laboratories and Clinics, the Office of the Director, and outstanding non-NCI scientists.

1.	"Sources Sought" notice in Commerce Business Daily.	Nov.12, 1971
2.	Deadline for receipt of responses to advertisement.	Dec. 3, 1971
3.	Selection of "Sources Sought" respondees for solicitation.	Dec. 20, 1971
4.	Issuance of the Requests for Proposals to selected respondees.	Jan. 1, 1972
5.	Briefing session and inspection of Fort Detrick by prospective contractors (bidders' conference).	Jan. 20, 1972
6.	Deadline for receipt of proposals.	Mar. 1, 1972
7.	Evaluation of proposals	Mar. 15 - Apr. 15, 1972
8.	Award of contract	June 15, 1972
9.	Occupation and setup by contractor at Fort Detrick; project initiation	June 30, 1972